

## **Bridge Prequalified Products List**

### **General**

The Bridge Prequalified Products List (BPPL) contains current pre-qualified products for many items used in highway structures. This list is applicable to department purchases and construction contracts. Additional information about the BPPL may be obtained by e-mailing [bppl@mail.modot.state.mo.us](mailto:bppl@mail.modot.state.mo.us).

### **Lists**

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**Masonry Seal Coating and Graffiti Control**

- 1.) Weather Seal Siloxane  
ProSoCo, Inc.  
Phone 913-281-2700
- 2.) ENVIROSEAL 77 For Brick  
Harris Specialty Chemicals Inc.  
Phone 800-327-1570
- 3.) Rain Stopper 120  
Textured Coatings of America, Inc.  
Phone 954-581-0771
- 4.) Price Siloxane-6.7  
Price Research LTD.  
Phone 816-924-5955

## **Mechanically Stabilized Earth Wall Systems**

### **Large Block Wall Systems**

- 1.) Reinforced Earth  
The Reinforced Earth Company, Central Region  
1331 Airport Freeway, Suite 302  
Euless, TX 76040  
Phone 817-283-5503, Fax 817-283-6931
- 2.) Retained Earth Systems  
Foster Geotechnical, Midwest Division  
125 Windsor Drive, Suite 122  
Oak Brook, IL 60523  
Phone: 630-954-1450 / Fax: 630-954-1429
- 3.) Hilfiker Soil Embankment System  
T & B Structural Systems Inc.  
637 W. Hurst Boulevard  
Hurst, Texas 76035  
Phone 888-280-9858, Fax 817-280-9864
- 4.) Isogrid Retaining Wall System  
The Neel Co.  
8328 Traford Lane, Suite D  
Springfield, VA 22152  
Phone 703-913-7858, Fax 703-913-7859
- 5.) Tensar ARES Retaining Wall System  
Tensar Earth Technologies, Inc.  
5883 Glenridge Drive, Suite 200  
Atlanta, GA 30328  
Phone 404-250-1290, Fax 404-250-9185
- 6.) Strengthened Soil Systems  
Shaw Technologies Inc.  
P.O. Box 654  
Colleyville, Texas 76034  
Phone 817-427-0997, Fax 817-427-0998
- 7.) SSL MSE Plus Retaining Wall System  
SSL, LLC  
4740-E Scotts Valley Drive  
Scotts Valley, CA 95066  
Phone 831-430-9300, Fax 831-430-9340

Small Block Systems\*

\* These systems shall not be used for walls with a height greater than 10 ft [3.05 m] as measured from the top of the leveling pad to the top of the wall (including coping or top caps).

- \*1.) KEYSYSTEM 1 by  
Keystone Retaining Wall Systems  
4444 West 78th Street  
Minneapolis, Minnesota 55435  
Phone 612-897-1040, Fax 612-897-3858
- \*2.) Mesa Retaining Wall System  
Tensar Earth Technologies, Inc.  
5775-B Glenridge Drive  
Lakeside Center, Suite 450  
Atlanta, GA 30328  
Phone 404-250-1290, Fax 404-250-9056

Combination Wall Systems

Any combination of the prequalified geogrids and the prequalified wall facings below are considered a prequalified wall system, subject to the approval of the wall facing manufacturer. All geogrid used on an individual wall shall be produced by the same manufacturer.

Geogrids

- 1.) Tensar Geogrid (UX-HS or UX-SB equivalents of the UXMESA3 through UXMESA6 geogrids only)  
Tensar Earth Technologies  
5775-B Glenridge Drive  
Lakeside Center, Suite 450  
Atlanta, GA 30328  
Phone 404-250-1290, Fax 404-250-9185
- 2.) Miragrid (XT Series)  
TC Mirafi  
365 South Holland Drive  
Pendergrass, Georgia 30567  
Phone 888-795-0808 or 706-693-2226, Fax 706-693-4400
- 3.) VERSA-Grid (VG 3.0, VG 5.0 AND VG 8.0)  
Versa-Lok Retaining Wall Systems  
6348 Hwy. 36, Suite 1  
Oakdale, MN 55128  
Phone 800-770-4525 or 651-770-3166, Fax 651-770-4089
- 4.) Raugrid (2/3,3/3,4/2,6/3,8/3,10/3,13/3 and 15/3)  
Lückerhaus North America, Inc.  
841 East Main Street  
Spartanburg, SC 29302  
Phone 800-794-0910 or 864-583-8663, Fax 864-583-8664

- 5.) Geotex Geogrid (GG15, GG20, GG30, GG45, and GG85)  
SI Geosolutions  
P.O. Box 2570  
Lee's Summit, MO. 64063  
Phone 816-554-1202, Fax 816-554-2280
- 6.) Synteen Sympaforce Geogrid(SF20, SF35, SF55, SF80 and SF110)  
Mathews Engineered Products, Inc  
5211 Meadow Lakes Trail  
Rockford, MN 55373  
Phone 763-477-4045, Fax 763-477-4023

Wall Facing Elements for Use With Geogrid

\* These systems shall not be used for walls with a height greater than 10 ft [3.05 m] as measured from the top of the leveling pad to the top of the wall (including coping or top caps).

- \*1.) Versa-Lok Retaining Wall Systems  
Versa-Lok Standard Unit and Versa-Lok Square Foot Unit  
6348 Hwy. 36, Suite 1  
Oakdale, Minnesota 55128  
Phone 800-770-4525 or 651-770-3166, Fax 651-770-4089
- \*2.) Rockwood Retaining Wall Systems Inc.  
Classic Retaining Wall System  
325 Alliance Place NE  
Rochester, MN 55906  
Phone 888-288-4045, Fax 507-529-2879
- \*3.) Venture Retaining Wall Systems  
Baseline Unit, Delta I, Delta II, Victory I, Victory II, V-12 and Trinity  
One Park Centre  
1333 W. 120th Ave., Suite 312  
Denver, CO 80234  
Phone 303-254-8846, Fax 303-254-8901
- \*4.) Keystone Retaining Wall Systems (Standard, Compact or Mini units only)  
4444 West 78th Street  
Minneapolis, MN 55435  
Phone 612-897-1040, Fax 612-897-3858
- \*5.) Anchor Wall Systems, Inc.  
Diamond Unit  
Diamond Pro (Effective December, 2002 Letting)  
5959 Baker Road, Suite 390  
Minnetonka, Minnesota, 55345-5996  
Phone 800-473-4452 or 952-933-8855, Fax 952-933-8833

**Protective Coating for Concrete Bents and Piers**

- 1.) Horsyset.WD / Water Dispersed Epoxy  
Watson/Bowman- Acme  
95 Pine View Dr  
Amherst, New York 14228  
800-677-4922
- 2.) Carboline Multi-gard 954 Concrete Coating  
Carboline CO  
350 Hanley Industrial CT  
St. Louis, MO 63144  
314-644-1000
- 3.) Pilgrim Plastic  
Pilgrim Permocoat, Inc.  
402 S 22nd Street  
Tampa, FL 33605  
Phone 813-248-3328, Fax 813-248-1076

**Protective Coating for Concrete Bents (Weathering Steel)**

- 1.) SACRIFICIAL GRAFFITI GARD SYSTEM  
Textured Coatings of America  
3009 Greene Street  
Hollywood, FL 33020-1038  
Phone 954-581-0771, Fax 954-581-9516

**Resin Anchors Systems (Bridges)**

The following are the approved resin anchor systems which will be accepted, except that the system used shall also meet any additional requirements as shown on the bridge plans. The manufacturer shall certify the minimum ultimate pullout strengths. Reinforcing bars or threaded rods used with these systems shall be as specified on the bridge plans.

1. Hilti HVA and HEA Adhesive Anchor System, Hilti Hit Doweling (C-IO), Hit HY-150 Anchor Systems and HSE-2411 as manufactured by Hilti, Inc., P.O. Box 21148, Tulsa, Oklahoma 74121
2. Molly Parabond Capsule and Paramount Pour Anchor Systems as manufactured by Molly Division, USM Corp., 504 Mt. Laurel Ave., Temple, Pennsylvania 19560
3. Sup-R-Set Synthetic Resin Capsule Anchor System as manufactured by U.S.E. Diamond, Inc., P. O. Box 1589, 500 State Street, York, Pennsylvania 17405
4. Ramset Chemset Anchor System as manufactured by Ramset Fastening System, Shamrock Ave., East Alton, Illinois 62024
5. ESSVE Chemical Anchor UKA 3 System as manufactured by ESSVE OF NORTH AMERICA, INC., 8825 Roswell Road, Suite 600, Dunwoody, Georgia 30338
6. Redi-Chem Anchor System as manufactured by ITT Phillips Drill Division (Red Head), P. O. Box 364, Michigan City, Indiana 46360
7. Moore Adhesive Capsule Anchor System as manufactured by Moore Construction Products, Inc., 429 Boston Turnpike, Shrewsbury, MA 01545
8. Sure Chemical Anchor System as manufactured by AMCA International, 2701 Industrial Drive, Bowling Green, KY 42101
9. Sikadur 31 Hi-Mod Gel and Injection Gel Anchor Systems as manufactured by Sika Corporation, P. O. Box 297, Lyndhurst, New Jersey 07071
10. Anchor-It Bolt Grout Anchor System used with Solid Bond 200 epoxy groutas manufactured by Adhesive Technology Corporation, 21850 88th Pl. S., Kent, WA 98031
11. Kelibond/KeligROUTIN and Kelipoxy Anchor Systems as manufactured by Kelken-Gold, Inc., P. O. Box 356, Hazlet, New Jersey 07730
12. Sup-R-Resin 392 High Strength Polyester Grout Anchor System as manufactured by U.S.E. Diamond, Inc., P. O. Box 1589, 500 State Street, York, PA 17405
13. Poly-Carb Mark-198 Epoxy Grout Anchor System as manufactured by Poly-Carb, 33095 Bainbridge Road, Cleveland, Ohio 44139
14. Poly-All Anchoring System as manufactured by Ackerman Johnson Fastening Systems, Inc., 327 Factory Road, Addison, Illinois 60101
15. Permagile 1-215 HM Gel and Permagile Bond-I Gel Anchoring Systems both manufactured by Permagile Industries, Inc., 101 Commercial Street, Plainview, New York 11803
16. Powers Rawl Chem-Stud Anchor System and Powers Rawl Hammer-Capsule as manufactured by Powers Fastening, Inc., 2 Powers Square, New Rochelle, New York 10801

17. MP-3 Polyester Anchoring System as manufactured by Energy Absorption System, Inc., One East Wacker Drive, Chicago, Illinois 60601
18. Celtite 21-24 TX Grout, 21-30 Anchortite and Anchor Bond Anchor Systems all manufactured by Celtite, Inc., 13670 York Road, Cleveland, Ohio 44133
19. Moore HAC Hammer Capsules as manufactured by Moore Construction Products, 250 Barber Avenue, Worcester, MA 01606, Tel. (508) 853-3991
20. Pro-Poxy 400, Pro-Poxy 300 and Pro-Poxy 300 Fast æ manufactured by Unitex, 3101 Gardner, Kansas City, MO 64120
21. R-304 as manufactured by Richmond Screw Anchor Co., 417 Main Street, Fenton, MO 63026
22. Ankr-tite and Slam-tite as manufactured by Ankr-tite Fastening Systems, 2415 E. 13th Place, Tulsa, OK 74104
23. Spec Bond 201 as manufactured by Conspec Marketing and Manufacturing Co., Inc., 636 South 66th Terrace, Kansas City, KS 66111
24. Ramset Maxima 7, Ramset Impact glass capsule, Epcon Acrylic 7 Adhesive and Epcon Ceramic 6 Epoxy Adhesive as manufactured by ITW Ramset/Red Head, 1300 North Michael Dr., Wood Dale, IL 60191
25. Ultrabond 1300, Ultrabond EZ-Set Capsules, Ultrabond Glass Capsules and Ultrabond Speed Set-2 as manufactured by US Anchor Corp., 450 E. Copans Rd., Pompano Beach, FL 33064
26. Inject-Tite Fast Set and Inject-Tite Standard Set as marketed by Ankr-Tite Fastening System, 2415 E. 13th Place, Tulsa, OK 74104
27. Polyject #1257 as manufactured by Polygem, Inc., P.O. Box 609, West Chicago, IL 60185
28. Rezi-Weld Gel Paste-State Unitized Cartridge as marketed by W. R. Meadows, P.O. Box 543, Elgin, IL 60121
29. ArrowBond 1300 and ArrowBond 1300 Fast as marketed by Fenton Supply Inc., 983 Gravois Road, Fenton, MO 63026
30. R-304 as marketed by Symons Corporation, 200 E. Touhy Ave., Des Plaines, IL 60018
31. HI-TECH Standard Gel and HI-TECH Structural Gel - Fast as marketed by HI-TECH Structural Epoxy Systems, 9239 Utica Ave., Suite 150, Rancho Cucamonga, CA 91730
32. Anchor Gel - Two Hour Cure as marketed by CPR Products, Inc., 1250 Gravois Road, St. Louis, MO 63104
33. CWC 910 Epoxy – as marketed by Carter Waters Corporation, 2440 West Pennway, Box 412676, Kansas City, MO 64141
34. Rapid Gel & Epogel – as marketed by ChemRex Inc., 889 Valley Park Drive, Shakopee, MN 55379
35. Acrylic Tie – as marketed by Simpson Strong Tie, 1720 Couch Dr., McKinney, TX 75069



These anchor systems shall be installed according to the manufacturer's specifications with the following exceptions:

1. Kelibond/KeligROUTIN Anchor System shall have a minimum embedment of 6-1/2" [170 mm] for 5/8" [16 mm] diameter rods or reinforcing bars and a 8" [205 mm] minimum embedment for 3/4" [19.5 mm] or 7/8" [22.2 mm] diameter rods or reinforcing bars.
2. Sikadur 31 Hi-Mod Gel and Injection Gel Anchor Systems and Sure Chemical Anchor System shall have a minimum embedment of 5" [130 mm] for 5/8" [16 mm] diameter rods or reinforcing bars and a 6 3/4" [180 mm] minimum embedment for 3/4" [19.5 mm] and 7/8" [22.2 mm] diameter rods or reinforcing bars.
3. Anchor-It Bolt Grout Anchor System, Permagile 1-215 HM Gel Anchoring System, Permagile Bond-I Gel Anchoring System, Rawl Chem-Stud Anchor System, MP-3 Polyester Anchoring System, and Poly-Carb Mark-198 (Kelken-Gold Kelipoxy) Epoxy Grout Anchor System shall have a minimum embedment of 5" [130 mm] for 5/8" [16 mm] diameter rods or reinforcing bars and 7" [180 mm] for 3/4" [19.5 mm] and 7/8" [22.2 mm] diameter rods or reinforcing bars.
4. Celtite 21-24 TX Grout, 21-30 Anchortite and Anchor Bond Anchor Systems shall have a minimum embedment of 6 1/2" [170 mm] for 5/8" [16 mm] diameter rods or reinforcing bars and a 8" [205 mm] minimum embedment for 3/4" [19.5 mm] and 7/8" [22.2 mm] diameter rods or reinforcing bars.

**Special Mortar**1.) Thorite, Thoroseal and Acryl 60

This material shall be standard gray color and meet the requirements of Federal Specification TT-P-0035.

Thorite as supplied by Thoro System Products must be applied in 1/2" [13 mm] to 1" [25 mm] layers with some cooling necessary between layers. The finished patch shall be coated with Thoroseal mixed with straight Acryl 60.

Mix the Thorite with a mixing liquid consisting of one part Acryl 60 to three parts of clean water in accordance with the manufacturer's recommendation.

2.) SikaTop 122 and SikaTop 122(Plus)

This material as supplied by Sika Chemical Corporation shall be concrete gray in color and shall be applied in accordance with manufacturer's recommendations.

This material is a cementitious polymer 2 component fast-setting nonsag mortar. It shall not be applied when the ambient temperature is below 45°F [8°C]. It shall be applied to a clean surface that is damp, but free from standing water. Curing is not required under most conditions. If ambient conditions, such as high temperatures, low humidity, or strong winds might cause premature surface drying, moist cure with a fine mist spray of water or wet burlap for a minimum of 6 hours. A scrub coat shall be applied filling all pores and voids prior to the placement of SikaTop 122 or SikaTop 122(Plus).

Aggregate meeting the requirements of Sec 1005.2.4.1 may be utilized for applications greater than 1" [25 mm] in depth except for overhead repair. For overhead repairs greater than 1" [25 mm] in depth SikaTop 122 or SikaTop 122(Plus) shall be applied in layers not to exceed 1" [25 mm] in thickness.

SikaTop 123 or SikaTop 123(Plus) may be used at the contractor's option for deep overhead repairs and applied in accordance with the manufacturer's recommendations in layers not to exceed 1-1/2" [38 mm].

3.) Deco-Rez TPM 722

This material as supplied by General Polymers Corporation shall be concrete gray in color and shall be applied in accordance with the manufacturer's recommendations.

This material is a cementitious co-polymer fast-setting mortar. It shall not be applied when the ambient temperature is below 45°F [8°C] or when the temperature is expected to fall below 40°F [4.4°C] within 48 hours. It shall be applied to a clean surface that is damp, but free from standing water. A scrub coat of mortar shall be forced into the surface to fill all voids and pores beginning at the edge of the repair and working toward the center prior to placement of Deco-Rez TPM 722. Curing is normally not required, however, under conditions of high heat, low humidity, or strong winds the surface should be kept damp by misting with water, covering with wet burlap, or using a solvent free compound.

Aggregate meeting the requirements of Sec 1005.2.4.1 may be utilized for repairs greater than 1-1/2" [38 mm] in depth.

4.) SikaSet Roadway Patch

This material as supplied by Sika Chemical Corporation shall be concrete gray in color and shall be applied in accordance with manufacturer's recommendations. This material is intended for horizontal concrete surfaces and not intended for vertical or overhead patching.

This material is a cementitious 1 component fast-setting mortar. It shall be applied when the surface temperature is 45°F [8°C] and rising. It shall be applied at not less than 1/2" [13 mm] thickness to a clean surface that is damp, but free from standing water. A scrub coat of mortar shall be applied filling all pores and voids prior to the placement of SikaSet Roadway Patch. The patch shall be kept moist and protected from heat, direct sunlight and wind for a minimum of 6 hours.

Aggregate mixed in accordance with the manufacturer's recommendations and meeting the requirements of Sec 1005.1.3, Gradation E modified to have 100% passing the 1/2" [13 mm] sieve, may be utilized for applications greater than 1" [25 mm] in depth. The aggregate shall be added at a rate not to exceed 42 lbs per 60-lb unit [19.1 kg per 27.2-kg unit] of SikaSet Roadway Patch.

**Special Mortar (Fast Setting)****1.) Set-45**

This material as supplied by Master Builders shall be applied in accordance with manufacturer's recommendations.

This material is a one-component magnesium phosphate concrete. It is fast setting with a high early strength and all-weather use capability. It shall be applied full depth in one lift to a clean, dry surface. Depth of patch shall not be less than 1/2" [13 mm]. Work the material firmly into the bottom and sides of the patch to assure a good bond. Use of a bonding agent is not required.

This material shall be allowed to air-dry for a proper cure. Use of a curing compound or wet-curing process is not permitted. The patch shall be protected from traffic for a minimum of 4 hours.

Aggregate mixed in accordance with the manufacturer's recommendations and meeting the requirements of Sec. 1005.5.1.3, Gradation E, may be utilized for applications greater than 1" [26 mm] in depth. The aggregate shall be added at a rate not to exceed 30 lbs per 50-lb bag [13.6 kg per 22.7-kg bag] of Set-45.

**2.) SikaSet Roadway Patch**

This material as supplied by Sika Chemical Corporation shall be concrete gray in color and shall be applied in accordance with manufacturer's recommendations. This material is intended for horizontal concrete surfaces and not intended for vertical or overhead patching.

This material is a cementitious 1 component fast-setting mortar. It shall be applied when the surface temperature is 45°F [7.2°C] and rising. It shall be applied at not less than 1/2" [13 mm] thickness to a clean surface that is damp, but free from standing water. A scrub coat of mortar shall be applied filling all pores and voids prior to the placement of SikaSet Roadway Patch. The patch shall be kept moist and protected from heat, direct sunlight, wind and traffic for a minimum of 4 hours.

Aggregate mixed in accordance with the manufacturer's recommendations and meeting the requirements of Sec 1005.5.1.3, Gradation E, may be utilized for applications greater than 1" [26 mm] in depth. The aggregate shall be added at a rate not to exceed 42 lbs per 60-lb unit [19.1 kg per 27.2 kg unit] of SikaSet Roadway Patch.

3.) Speed Crete 2028

This material as supplied by Tamms Industries and shall be applied in accordance with manufacturer's recommendations. This material is intended for horizontal concrete surfaces and not intended for vertical or overhead patching and can be used for all weather repairs according to the manufactures recommendations.

This material is a cement based, ready to use, patching and repair mortar which sets fast and achieves rapid strength gain. It shall be applied at not less than 1/2" [13 mm] thickness to a surface that is structural sound, clean, dry, free of loose or deteriorated concrete, dust, dirt and all contaminants. Clean and prime exposed steel and reinforcing as recommended by the manufacture. The Speed Crete patch normally does not require wet cure or a curing compound. Do not featheredge, overwork, re-temper or overtrowel the patching material. Do not add any admixtures or bonding agents to Speed Crete 2028. The patch area should be frost free prior to application. The patch shall be protected from traffic for a minimum of 4 hours.

Aggregate mixed in accordance with the manufacturer's recommendations may be utilized for applications greater than 2" [50 mm] in depth. For repairs areas greater than 2" [50 mm] in depth, extend by adding up to 50 lbs [22.6 kg] of 3/8" [9.5 mm] clean well graded SSD pea gravel per 50 lbs [22.6 kg] of Speed Crete 2028.

**Strip Seal Expansion Joint System**

- 1) Wabo-Maurer Strip Seal  
Watson-Bowman & Acme Corporation  
95 Pineview Drive  
Amherst, New York 14228  
Phone 716-691-8162
- 2) Steelflex Strip Seal  
D. S. Brown Company  
300 E. Cherry Street  
North Baltimore, Ohio 45872  
Phone 419-257-3561
- 3) RJ SERIES Strip Seal  
R.J. Watson, Inc.  
78 John Glenn Drive  
East Amherst, NY 14051  
Phone 716-691-3301